

CLAIMS

We claim:

1. A method comprising:
providing a plurality of behavioral parameters associated with a design feature selected by a user;
receiving one or more of the plurality of behavioral parameters from the user;
and
modeling the design feature based on the one or more of the plurality of behavioral parameters.
2. The method of claim 1 wherein the one or more of the plurality of the behavioral parameters reflect functionality intended by the user for the design feature.
3. The method defined in Claim 2 further comprising:
receiving a user request to modify a geometric parameter of the design feature; and
modifying the geometry of the design feature while maintaining the intended functionality of the design feature.

4. The method defined in Claim 1 further comprising:
receiving one or more geometric parameters pertaining to the design feature
from the user.

5. The method defined in Claim 1 further comprising:
displaying a user interface facilitating selection of the one or more behavioral
parameters by the user.

6. The method defined in Claim 1 further comprising:
displaying the modeled design feature on a screen.

7. The method defined in Claim 1 further comprising:
defining a plurality of behavioral parameters for each of a plurality of design
features using a set of rules associated with a corresponding application.

8. The method defined in Claim 1 wherein modeling the design feature
comprises:
calculating geometry of the design feature based on the one or more of the
plurality of behavioral parameters.

9. The method defined in Claim 8 further comprising:
determining a relation between the current design feature and a previously
created design feature based on the one or more of the plurality of behavioral
parameters.

10. The method of defined in Claim 9 further comprising:
receiving a user request to modify a geometric parameter of the previously
created design feature;
modifying the previously created design feature; and
adjusting the current design feature to maintain functionality defined by the
one or more of the plurality of behavioral parameters.

11. An apparatus comprising:
a user interface to display a plurality of behavioral parameters associated with
a design feature selected by a user and to facilitate user selection of one or more of
the plurality of behavioral parameters; and
a modeler to model the design feature based on the one or more of the
plurality of behavioral parameters.

12. The apparatus of claim 11 wherein the one or more of the plurality of the behavioral parameters reflect functionality intended by the user for the design feature.

13. The apparatus of claim 11 wherein the modeling algorithm is further to receive a user request to modify a geometric parameter of the design feature, and to modify the geometry of the design feature while maintaining the intended functionality of the design feature.

14. The apparatus of claim 11 wherein the user interface is further to facilitate user input of one or more geometric parameters pertaining to the design feature.

15. The apparatus of claim 11 wherein the user interface is further to display the design feature.

16. The apparatus of claim 11 wherein further comprising a parameter generator to define a plurality of behavioral parameters for each of a plurality of design features using a set of rules associated with a corresponding application.

17. The apparatus of claim 11 wherein the modeling algorithm is to model the design feature by calculating geometry of the design feature based on the one or more of the plurality of behavioral parameters.

18. The apparatus of claim 17 wherein the modeling algorithm is further to determine a relation between the current design feature and a previously created design feature based on the one or more of the plurality of behavioral parameters.

19. The apparatus of claim 18 wherein the modeling algorithm is further to receive a user request to modify a geometric parameter of the previously created design feature, to modify the previously created design feature, and to adjust the current design feature to maintain functionality defined by the one or more of the plurality of behavioral parameters.

20. A system comprising:
means for providing a plurality of behavioral parameters associated with a design feature selected by a user;

means for receiving one or more of the plurality of behavioral parameters from the user; and

means for modeling the design feature based on the one or more of the plurality of behavioral parameters.

21. A computer readable medium comprising executable instructions which when executed on a processing system cause said processing system to perform a method comprising:

providing a plurality of behavioral parameters associated with a design feature selected by a user;

receiving one or more of the plurality of behavioral parameters from the user; and

modeling the design feature based on the one or more of the plurality of behavioral parameters.